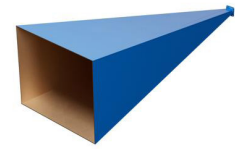


WR-90 Waveguide Standard Gain Horn Antenna  
Operating from 8.4 GHz to 12.4 GHz with a Nominal  
30 dBi Gain with UG-135/U Square Cover Flange



**FM9856B-30**

**Features**

- WR-90 Rectangular Waveguide Interface
- 8.4 GHz to 12.4 GHz
- 30 dBi Nominal Gain
- UG-135/U Square Cover Flange

**Applications**

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio System

**Description**

Fairview Microwave's FM9856B-30 WR-90 waveguide horn is also known as a waveguide horn antenna. This WR-90 standard gain horn waveguide antenna has a nominal gain of 30 dBi. Our waveguide horn can operate at frequencies ranging from 8.4 to 12.4 GHz. The standard gain horn antenna has a typical VSWR of 1.5:1 and is suitable for test and measurement industries. This 30 dBi waveguide horn from Fairview Microwave has an overall length of 37.5 inches, a width of 16.19 inches, and a weight of 2 lbs. Our WR-90 waveguide horn antenna has a typical vertical beam width of 5 degrees and a horizontal beam width of 5 degrees at 3 dB.

Our antenna comes with a UG-135/U square cover flange and is built to precise microwave and millimeter wave horn antenna design specifications. This WR-90 standard gain horn antenna has an aluminum body. Additional dimensions and specifications for this antenna are on our downloadable PDF datasheet.

This WR-90 waveguide horn antenna with 30 dBi gain is part of over one million RF, microwave, and millimeter wave components available from Fairview Microwave. Our horn antenna can ship worldwide on the same business day as it is purchased with our other available RF parts. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal waveguide horn that meets your requirements.

**Configuration**

Design: WR-90 Standard Gain Horn  
Pattern: Directional

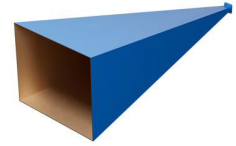
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.4		12.4	GHz
Nominal Gain		30		dBi
Horizontal Half Power Beam Width		5		Degrees
Vertical Half Power Beam Width		5		
VSWR		1.5:1		

**Mechanical Specifications**

Size:  
Length: 37.5 in [952.5 mm]  
Width: 16.19 in [411.23 mm]  
Height: 12.49 in [317.25 mm]  
Weight: 2 lbs [907.18 g]

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## FM9856B-30

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### Waveguide Interface

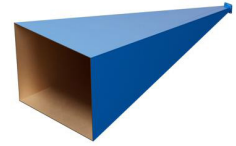
Waveguide Size	WR-90
Flange Type	Square Cover
Flange Designation	UG-135/U
Body Material and Plating	Aluminum, Paint

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

WR-90 Waveguide Standard Gain Horn Antenna  
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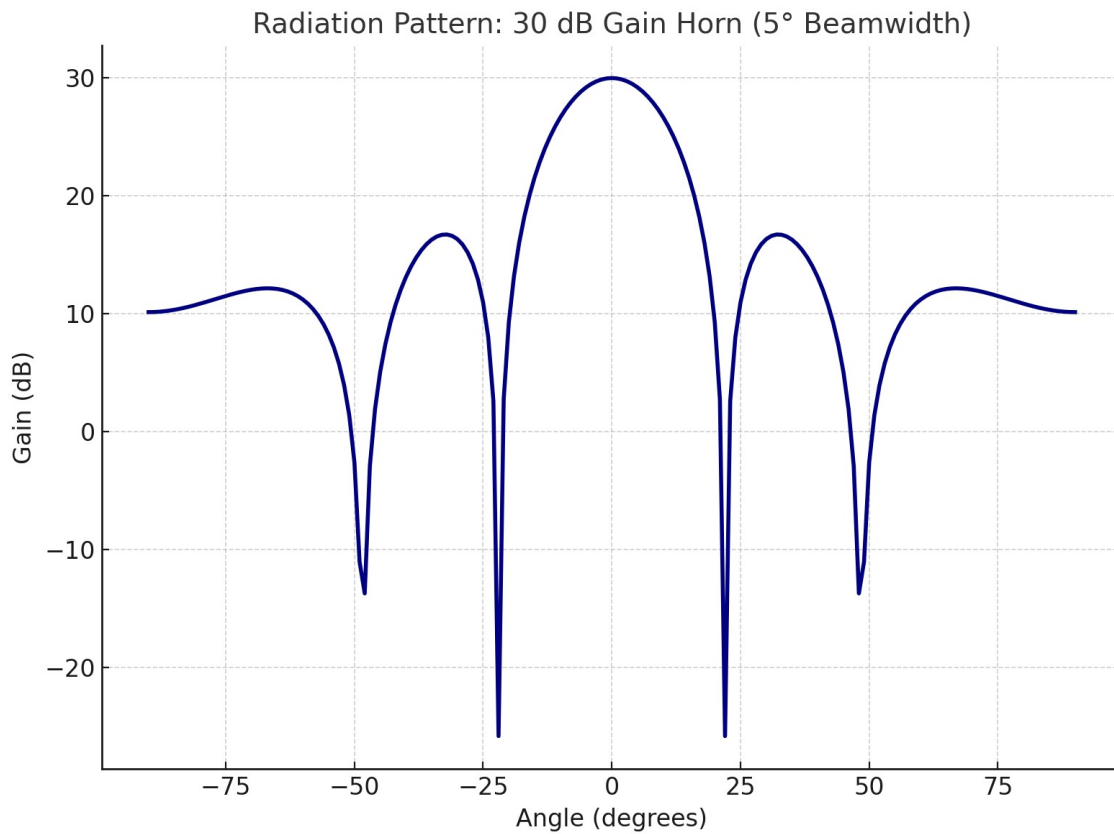


**FM9856B-30**

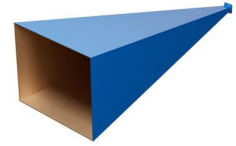
Typical Performance Data

30 dB STANDARD GAIN HORN

Typical Radiation Pattern



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**FM9856B-30**

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WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.4 GHz to 12.4 GHz with a Nominal 30 dBi Gain with UG-135/U Square Cover Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.4 GHz to 12.4 GHz with a Nominal 30 dBi Gain with UG-135/U Square Cover Flange FM9856B-30](https://www.fairviewmicrowave.com/wr-90-waveguide-standard-gain-horn-30-dbi-ug-135-fm9856b-30-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr-90-waveguide-standard-gain-horn-30-dbi-ug-135-fm9856b-30-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

# FM9856B-30 CAD Drawing

WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.4 GHz to 12.4 GHz with a Nominal 30 dBi Gain with UG-135/U Square Cover Flange

